

WHAT IS CLAIMED IS:

1. An information processing unit comprising:
 - a reading section for reading information recorded in a recording medium;
 - an information processing section for processing the information read by the reading section;
 - a change instruction recognizing section for recognizing an instruction for changing a processing state of said information in the information processing section;
 - a change condition selecting section for selecting at least either one of the processing details for starting or stopping the processing of the information or the processing for changing a processing position of said information; and
 - a processing control section for changing, when the instruction for changing the information processing state is recognized by said change instruction recognizing section, the processing state in said information processing section according to the processing details selected in said change condition selecting section.
- 15 2. An information processing unit comprising:
 - a reading section for reading information recorded in a recording medium;
 - an information processing section for processing the information read by the reading section;
 - a change instruction recognizing section for recognizing an instruction for changing a processing position of said information in the information processing section;
 - a change condition setting section for setting processing details for changing the processing position of said information forward or backward and processing details for changing the processing position of said information to a prespecified processing position of said information; and
 - 25 a processing control section for changing, when an instruction for changing the information processing position is recognized by said change instruction recognizing section, the processing position in said information processing section according to the processing details set by said change condition setting section.
3. The information processing unit according to claim 1 further comprising:

a positional instruction recognizing section for recognizing an instruction for the processing start position to have the information processed at the same position again, wherein said processing control section changes a processing position of said information processing section to the processing start position according to the instruction recognized by said positional instruction recognizing section.

4. The information processing unit according to claim 2 further comprising:

a positional instruction recognizing section for recognizing an instruction for the processing start position to have the information processed at the same position again, wherein said processing control section changes a processing position of said information processing section to the processing start position according to the instruction recognized by said positional instruction recognizing section.

5. The information processing unit according to claim 3, wherein the information recorded in the recording medium includes data and positional information concerning a position of the data, said information processing unit further comprising:

15 a position recording section for recording, when an instruction for a processing start position is recognized by the positional instruction recognizing section, said processing start position and information preceding and following said processing start position; wherein said processing control section changes a processing position in said information processing section to the processing start position according to said positional information recorded in said position recording section.

6. The information processing unit according to claim 4, wherein the information recorded in the recording medium includes data and positional information concerning a position of the data, said information processing unit further comprising:

25 a position recording section for recording, when an instruction for a processing start position is recognized by the positional instruction recognizing section, said processing start position and information preceding and following said processing start position; wherein said processing control section changes a processing position in said information processing section to the processing start position according to said positional information recorded in said position recording section.

7. The information processing unit according to claim 5, wherein the processing control section makes, when the processing position in the information processing section is changed to the processing start position, said information processing section process the data for the information recorded in the position recording section.

5 8. The information processing unit according to claim 6, wherein the processing control section makes, when the processing position in the information processing section is changed to the processing start position, said information processing section process the data for the information recorded in the position recording section.

9. The information processing unit according to claim 1, wherein said change
10 instruction recognizing section determines whether a pressing operation or a touching operation has been performed or not, and said processing control section makes the information processing section change the processing state of the information or move the processing position of the information to the processing start position when said change instruction recognizing section determines that a pressing operation or a touching
15 operation has been performed.

10. The information processing unit according to claim 2, wherein said change instruction recognizing section determines whether a pressing operation or a touching operation has been performed or not, and said processing control section makes the information processing section change the processing state of the information or move the processing position of the information to the processing start position when said change instruction recognizing section determines that a pressing operation or a touching
20 operation has been performed.

11. The information processing unit according to claim 9, wherein said change instruction recognizing section is divided to several blocks, and said processing control
25 section changes, when it is determined in said change instruction recognizing section that a specific block has been pressed or touched, a processing position in said information processing section based on the processing start position corresponding to said specific block.

12. The information processing unit according to claim 10, wherein said change

instruction recognizing section is divided to several blocks, and said processing control section changes, when it is determined in said change instruction recognizing section that a specific block has been pressed or touched, a processing position in said information processing section based on the processing start position corresponding to said specific

5 block.

13. An information processing unit comprising:

a reading section for reading information recorded in a recording medium;

an information processing section for processing the information read by the reading section;

10 a positional instruction recognizing section for recognizing an instruction for a processing start position to have said information processed at the same position again;

a position recording section for recording, when an instruction for the processing start position is recognized by the positional instruction recognizing section, said processing start position and information preceding and following said processing start 15 position;

a change instruction recognizing section for recognizing an instruction for changing a position of said information to be processed by said information processing section;

20 a processing control section for changing, when the instruction for changing a position of said information to be processed is recognized by the change instruction recognizing section, a position of the information by said information processing section to the processing start position based on the information recorded in said position recording section.

25 14. The information processing unit according to claim 13, wherein the information recorded in the recording medium includes positional information concerning data and a position of the data,

said position recording section records a processing start portion corresponding to an instruction recognized by the positional instruction recognizing section and said information preceding and following the processing start position; and

said processing control section changes a position for processing in said information processing section according to said positional information included in said position recording section.

15. The information processing unit according to claim 14, wherein said processing
5 control section makes said information processing section process data for the information recorded in the position recording section when the position for processing by the information processing section is changed to the processing start position.

16. The information processing unit according to claim 1, wherein said change instruction recognizing section is rotatably provided to detect the rotating direction, and

10 said processing control section moves a position for processing by the information processing unit forward or backward according to the rotating direction detected by said change instruction recognizing section.

17. The information processing unit according to claim 2, wherein said change instruction recognizing section is rotatably provided to detect the rotating direction, and

15 said processing control section moves a position for processing by the information processing unit forward or backward according to the rotating direction detected by said change instruction recognizing section.

18. The information processing unit according to claim 13, wherein said change instruction recognizing section is rotatably provided to detect the rotating direction, and

20 said processing control section moves a position for processing by the information processing unit forward or backward according to the rotating direction detected by said change instruction recognizing section.

19. The information processing unit according to claim 1 further comprising:

25 a read control section for controlling operations of the reading section, wherein said read control section makes, when a position for processing by the information processing section is changed by the processing control section, the reading section read information near said changed processing position.

20. The information processing unit according to claim 2 further comprising:

a read control section for controlling operations of the reading section, wherein

said read control section makes, when a position for processing by the information processing section is changed by the processing control section, the reading section read information near said changed processing position.

21. The information processing unit according to claim 13 further comprising:

5 a read control section for controlling operations of the reading section, wherein said read control section makes, when a position for processing by the information processing section is changed by the processing control section, the reading section read information near said changed processing position.

22. An information processing unit comprising:

10 a reading section for reading information recorded in a recording medium;
an information processing section for processing the information read by the reading section;

a change instruction recognizing section for recognizing a change instruction for changing a processing state of said information in the information processing section; and

15 a processing control section for making, when the change instruction for changing the processing state of the information is recognized by said change instruction recognizing section, said information processing section execute at least either one of the processing for starting or stopping processing of said information or the processing for changing a processing position of said information.

20 23. An information processing unit comprising:

a reading section for reading information recorded in a recording medium;
an information processing section for processing the information read by the reading section;

25 a change instruction recognizing section for recognizing a change instruction for changing a position of said information to be processed by this information processing unit; and

a processing control section for making, when a change instruction for changing a processing position of the information is recognized by the change instruction recognizing section, said information processing section execute both the processing for changing a

processing position of said information to a preset processing start position and the processing for moving the processing position of said information forward or backward.

24. An information processing method comprising the steps of:

reading information recorded in a recording medium and processing the
5 information;

selecting at least either one of the processing for starting or stopping the processing of said information or the processing for changing a processing position of said information; and

changing the processing state of said information based on the selected
10 processing when a change instruction for changing the processing state of said information is recognized.

25. An information processing program for making a computing section execute the information processing method according to claim 24.

26. A recording medium for recording the information processing program therein,
15 wherein the information processing program according to claim 25 is recorded so that the program can be read out by the computing section.

27. A reproducing unit comprising the information processing unit according to claim 1, and a reproducing section for fetching and reproducing the information processed by the information processing unit.

20 28. The reproducing unit according to claim 27, wherein said information processing section processes music data recorded in a recording medium for reproducing the music data;

25 said change instruction recognizing section is a rotating body which is rotatably provided and detects a rotating operation, a pressing operation, and a touching operation to this rotating body to recognize a change instruction for changing a processing position to process the music data so that the music data can be reproduced;

said processing control section changes a position for processing by said information processing section to a previously stored position in response to a pressing operation or a touching operation detected by said change instruction recognizing section,

and further changes the position for processing by said information processing section forward or backward in response to an rotating operation detected by said change instruction recognizing section; and

a reproducing section outputs the information processed by said information processing section as voices and sounds.

5 29. A reproducing unit comprising:

the information processing unit according to claim 22; and

a reproducing section for fetching and reproducing the information processed by the information processing unit, wherein the change instruction recognizing section of said 10 information processing unit is a rotating body which is rotatably provided and detects a rotating operation, a pressing operation, or a touching operation to the rotating body to recognize a change instruction for changing the processing position to process the music data so that the data can be reproduced; and

the processing control section of said information processing unit changes the 15 position for processing by the information processing section in the information processing unit to a previously stored position when a state shift from the not-pressed state to the pressed state or that from the not-touched to the touched-state is detected by said change instruction recognizing section, and further moves the position for processing by said information processing section, when a pressing operation or a touching operation is 20 detected by said change instruction recognizing section and further a rotating operation is detected in the state, forward or backward in the rotating direction.